

3.9 VISUAL RESOURCES

This section provides an overview of visual resources associated with the Falcon to Gonder project. It includes a description of the analysis area, methodology, and BLM management plans and policies relevant to visual resources in the study area. This is followed by an assessment of potential visual impacts and mitigation measures.

3.9.1 AREA OF ANALYSIS AND METHODOLOGY

The area of analysis for visual resources covers 1.5 miles on either side of the proposed transmission line (3-mile wide corridor) and 29 Key Observation Points (KOPs) selected along the route alternatives. One mile is generally the extent at which human-made features are visible. In general, features beyond this zone are so distant that only forms and outlines are discernable, and visual impacts are negligible.

Visual resources, as defined by the BLM, are the visible physical features of a landscape (e.g., land, water, vegetation, animals, structures, and other features). All lands have inherent visual values, which warrant different levels of management, as it is neither desirable nor practical to provide the same level of management for all visual resources. For example, management of an area with high scenic value might be focused on preserving the existing character of the landscape, while management of an area with little scenic value might allow for major modifications. Determining an area's visual resources requires an assessment of the area's inherent scenic values (i.e., its visual appeal), assessing public concern for scenic quality, and developing appropriate management levels to protect it.

REGULATORY FRAMEWORK

Visual Resource Management (VRM) System

The proposed transmission line predominantly traverses lands administered by the BLM and is subject to the BLM Visual Resource Management (VRM) System. The Federal Land Policy and Management Act of 1976 (FLPMA) states that "...public lands would be managed in a manner which would protect the quality of the scenic (visual) values of these lands." Visual resources are to be considered in all BLM planning and environmental assessment documents.

To meet its responsibility to maintain the scenic values of public lands, the BLM has developed the VRM System. The VRM System is implemented through the Resource Management Plan (RMP) or Management Framework Plan (MFP) process (BLM 2000b). The VRM system inventories scenic values and establishes Visual Resource Management Classes (VRM Classes) for those values through the RMP process. Visual resource classes are categories assigned to public lands, which serves two purposes: (1) an inventory tool that portrays the relative value of the visual resources, and (2) a management tool that portrays the visual management objectives. The system identifies four classes: I, II, III, and IV.

Visual Resource Inventory

The visual resource inventory process provides BLM managers with a means for determining visual values of the landscape. Visual resource inventory classes are assigned through the inventory process based on scenic quality evaluations, sensitivity level analysis, and delineation of distance zones. BLM-administered lands are placed into one of four visual resource inventory classes. These inventory classes represent the relative value of the visual resources, Classes I and II having the highest values, Class III representing moderate value and Class IV being of least value.

The inventory classes only provide a basis for establishing visual values and do not establish management direction. The information provides a basis for considering visual values in the RMP process where management objectives are assigned.

Visual Resource Management Classes

Visual Resource Management (VRM) Classes are typically arrived at through the resource management planning process. The area's inventoried visual resources are assigned to VRM Classes with established management objectives. The objectives of each VRM Class, as stated in the BLM Handbook, Visual Resource Inventory (BLM 1986a), are as follows:

- **VRM Class I** – The objective is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.
- **VRM Class II** – The objective is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.
- **VRM Class III** – The objective is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.
- **VRM Class IV** – The objective is to provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

Interim Visual Resource Management Classes and Objectives

Interim visual management objectives are established when a project is proposed and there are no RMP or Management Framework Plan-approved VRM objectives. These objectives are developed using the guidelines in BLM VRM Manual Section 8410, Visual Resource Inventory, and must conform with the land use allocations set forth in the RMP which covers the project area.

Bureau of Land Management RMPs

Within the study corridor, three BLM field offices manage visual resources: the BLM's Elko Field Office manages the Elko planning area; the Battle Mountain Field Office manages the Shoshone-Eureka planning area; and the Ely Field Office manages the Egan planning area. With the exception of the Egan planning area, the RMPs for each of these areas contain visual management objectives related to visual resources.

Shoshone-Eureka RMP

The Shoshone-Eureka Planning Area contains 4.4 million acres of public land in north-central Nevada administered by the Battle Mountain District BLM (BLM 1984b). The area includes three principal towns: Austin, Battle Mountain, and Eureka. It encompasses most of Lander and Eureka Counties and a portion of Nye County. VRM Classes within its jurisdiction include Class II, III, and IV.

Elko RMP

The Elko RMP is a long-range plan to manage public lands within the Elko planning area of north-central Nevada (BLM 1986c). The Elko planning area consists of three units, the North Fork, Buckhorn, and Tuscarora, covering of approximately 5.9 million acres in the western half of Elko County and the northern portion of Lander and Eureka Counties. Over 3.1 million acres are public lands administered by the BLM. VRM Classes within its jurisdiction include Class II, III and IV. This RMP also designates the I-80 highway as a Low Visibility Corridor. The Low Visibility Corridor is a 3-mile wide (where possible) passage on which existing utility, transmission, and transportation facilities are located and for which future needs may be accommodated if the new facility is not evident in the characteristic landscape. The objective for visual resources within this corridor is for management actions not to be evident in the characteristic landscape.

Egan RMP

The Egan RMP is a 20-year plan to manage 3.8 million acres of public land within the Egan planning area in east-central Nevada, managed by the Ely District of the BLM (BLM 1984a). The majority of the planning area is located in White Pine County, although portions are also located in Nye and Lincoln Counties. In the Egan RMP, visual resources were not considered to be a land use issue; therefore, inventory, evaluation, and determination of VRM objectives were not completed. In conformance with the visual resource management policies of the BLM, the Egan RMP has established interim VRM Classes. Class I areas encompass the Mount Grafton Scenic Area; the designated BLM part of Currant Mountain Wilderness; the Goshute Canyon, Park Range, Riordan's Well, and South Egan Range WSAs; and Heusser Mountain Bristlecone Pine Natural Area and Goshute Canyon Natural Area Instant Study Areas (ISAs). Class II areas include the Ragged Ridge Scenic Area, the Pony Express Trail Corridor, and the Bristlecone Pine Interpretive Area. Class III areas include the existing campgrounds at Illipah reservoir, Garnet Hill, Cold Creek, and Goshute Canyon; proposed development areas at Antelope Summit, Bassett Lake, Cumins Lake, and along the Horse and Cattle Camp Backcountry Byway route; the Ward Mountain Winter Sports Area and the Egan Crest Trail route; and all mountain ranges, with the exception of portions that have been substantially altered by mining activities at the Robinson Mining Districts, Buck and Bald, White Pine, and Cherry Creek areas. Class IV areas consist of valley floors and lower slopes located below forested benchlands, and the mining areas excluded from Class III areas.

Wilderness Study Areas

A number of Wilderness Study Areas (WSAs) exist within the region. These are areas that possess wilderness characteristics and may have been recommended for consideration by the U.S. Congress for designation as wilderness. WSAs are areas that are roadless, natural in condition, and possess high scenic values. WSAs are currently managed under the BLM's Interim Management Policy (IMP) and Guidelines for Lands Under Wilderness Review (BLM 1995) until legislation takes effect to change their status. The major objective of the IMP is to manage lands under wilderness review in a manner that does not impair their suitability for designation as wilderness. In general, the only activities permissible under the IMP are temporary uses that create no new surface disturbance nor involve permanent placement of structures.

The closest one to the project is the Roberts Mountain WSA, located approximately 40 miles northwest of the town of Eureka. The Roberts Mountains WSA consists of 15,090 acres of the rugged Roberts Mountains and its three prominent peaks. Roberts Mountain has been inventoried in the Shoshone-Eureka RMP by the Battle Mountain District and has been assigned to VRM Class II.

State Scenic Byways Program

At various locations, the project traverses U.S. Highway 50, a State of Nevada designated Scenic Byway. However, the designation does not carry any legal protection or require compliance with visual resource protection policies¹.

METHODOLOGY

Impacts to visual resources were identified by considering what effects the project could have on the existing landscape through the evaluation of KOPs, and its potential conflicts with visual resource management objectives. The process typically includes: (1) establishing KOP locations along the transmission line in coordination with the BLM to evaluate visual impacts; (2) determining the visual contrast rating of the proposed transmission line from selected KOPs; (3) evaluating the visual contrast rating against the established VRM or interim VRM class objectives; (4) if applicable, evaluating the visual contrast rating against the cultural resource site's level of visual sensitivity; (5) assigning an impact rating to the proposed transmission line; and (6) developing mitigation measures to reduce adverse visual impacts of the transmission line.

To assess the extent of project-related visual impacts in the study area, the BLM VRM System is used to determine the proposed level of change in the landscape and whether it conforms to interim and established VRM Class objectives. Impacts on visual resources within the study corridor could result from various activities, including construction and operation of the transmission line, substation expansions, centerline travel route, and the temporary use of spur roads and material yards.

The route was visually inspected from various public roads and vantage points to develop an overall assessment of the potential impacts. BLM staff² established 29 Key Observation Points (KOPs) to assess the potential project impacts on sensitive visual resources, scenic landscapes, and vistas along the five transmission line route alternatives. [Figure 3.9-1](#) at the end of this section illustrates the locations and view orientation of each KOP. KOPs are located:

- Along major or significant travel corridors (e.g., Interstate 80, Highway 50, Highway 306, and Highway 278);
- At or near cultural, historic, and prehistoric sites (e.g., Pony Express Trail, Eureka-Palisade Railroad grade); and
- Near residential areas (e.g., Crescent Valley, Warm Springs Ranch).

Locations were selected to be typical views of the proposed transmission line as seen by a casual viewer and to portray potential impacts that could occur along the route.

At each KOP, the existing visual setting and proposed route location were evaluated. To characterize the potential impacts on scenic quality and the viewer's experience, photosimulations were prepared by introducing the transmission line and towers. The purpose of the photosimulation is to approximate the anticipated long-term appearance of the project in the existing landscape to evaluate potential visual impacts. Each KOP is evaluated using the BLM Visual Contrast Rating System and assigned a contrast value of Strong, Moderate, or Low to None. Photosimulations are presented for 23 of the 29 KOPs, showing both the existing conditions and with project conditions (see [Figures 3.9-2 through 3.9-30](#), at the end of this section). Four KOPs serve as context photos. Two KOPs representing a geologic feature were not simulated but were evaluated against the VRM system.

¹ Personal communication with John Whitaker, NDOT Roadway Information Systems Division, July 12, 2000.

² BLM Staff: Walt Brown, Christi Shaw, Steve Dondero, Timothy Murphy, and Mark Henderson, and Susan Howle.

The contrast can be measured by comparing the project's features with the major features in the existing landscape. The basic design elements of form, line, color, and texture are used to make this comparison and to describe the visual contrast created by the project. The contrast rating is used to determine whether the proposed level of change in the landscape would meet the management objectives established for the area. The level of impact can then be determined by comparing the contrast rating with the appropriate VRM Class objective in Table 3.9-1. The basic philosophy underlying the system considers the following: The degree to which a proposed activity affects the visual quality of a landscape depends on the visual contrast created between the proposed activity and the existing landscape.

TABLE 3.9-1: VISUAL IMPACT LEVEL

Visual Contrast ¹	Visual Resource Management Class		
	II	III	IV
Strong ²	High	High	Medium
Moderate ³	High	Medium	Low-None
Low-None ⁴	Medium	Low-None	Low-None

¹Visual contrast is evaluated for each segment of the proposed transmission line at selected KOPs.

²The element contrast demands attention, would not be overlooked, and is dominant in the landscape.

³The element contrast begins to attract attention and begins to dominate the characteristic landscape.

⁴The element contrast is not visible/perceived or can be seen but does not attract attention.

Impacts to Cultural Resource Visual Settings

Of particular concern are visual impacts to cultural resource sites where the integrity of the surrounding landscape is important to the context of the site. In these cases, the influence of the intrusion of the transmission line on the context of the cultural resource site should be an additional consideration in determining visual impacts. Visual impacts to cultural resources and the methodology used to determine the level of impact are discussed in Section 3.16, Cultural Resources. However, the visual simulations of the KOPs for these sites remain in this section.

3.9.2 AFFECTED ENVIRONMENT

This section provides an overview of the affected environment within the 3-mile wide study corridor (i.e., 1.5 miles on each side of the centerline). This area includes lands under private and federal ownership. The study corridor spans the northern reaches of the physisographic or geologic province of the Great Basin, a region characterized by uplifted and titled ranges punctuated by intervening valleys (Stewart 1980).

Ranges found along the corridor include Malpais Range (northern arm of Shoshone Range), Cortez Range, Sulphur Spring Range, Roberts Mountain, Egan Range, and the southern Cherry Creek Range. Valleys include Boulder Flat, Whirlwind, Crescent, Grass, Pine, Koben, Diamond, Huntington, Newark, Long, and Steptoe. Generally, the mountain ranges are classified as VRM Class II or III and valleys floors classified as Class IV, with the exception of areas that contain significant cultural resources in the Shoshone-Eureka and Elko planning areas.

The 3-mile wide study corridor encompasses approximately 180,815 acres with the majority under BLM jurisdiction. The lands are classified as follows.

- VRM Class II accounts for 2,132 acres, in which the objective is to retain the existing character of the landscape.

- VRM Class III accounts for 39,316 acres, in which the objective is to partially retain the existing character of the landscape.
- VRM Class IV accounts for 139,366 acres, in which the objective allows for management activities that require major modification.

The transmission line would traverse all three VRM Classes, with the majority occurring in VRM Class IV.

3.9.3 ENVIRONMENTAL CONSEQUENCES

The following section examines the project's likely impacts on visual resources. As many of the route alternatives share segments (e.g., Segments A and J are common to all of the routes), the analysis first addresses impacts common to all of the route alternatives. It then examines impacts specific to each of the route alternatives. This serves to reduce redundancy in discussion of the impacts and to present a clearer comparison of the alternatives. A discussion of the No Action Alternative is also included.

It should be noted that it is BLM policy to minimize all adverse visual impacts to the extent possible and not just those that are considered significant. Impacts to visual resources can be measured by the amount of change or degradation to the character of the natural landscape as seen from sensitive viewpoints, and whether the management objectives of applicable VRM Classes can be met. A guiding premise in conducting these impact analyses has been that all segments of the transmission line would result in some degree of visual change, since every segment would be sufficiently visible from some location (even though it may be remote). However, the more important consideration would be the level of significance the impact is considered to impose in areas that BLM has considered sensitive.

SIGNIFICANCE CRITERIA

Significance criteria for identifying impacts to visual resources include the following.

- **Significant/High Visual Impact** - The visual contrast of the project would exceed the VRM Class guidelines for an area, or conflict with applicable plans and adopted policies of government agencies and would result in a high visual impact.
- **Medium Visual Impact** - The visual contrast of the project would be fully at, but not exceed, the VRM Class guidelines for that area and would not be considered a significant visual impact.
- **Low/No Visual Impact** - The visual contrast of the project is clearly within the VRM Class guidelines for the area and would not be considered a significant visual impact.

ENVIRONMENTAL IMPACTS – COMPARISON OF ALTERNATIVES

Impacts Common to All Route Alternatives

The following section presents impacts to visual resources that would be common to all of the route alternatives (i.e., they would occur with any of the route alternatives). Potential direct and indirect impacts to visual resources that could occur along any of the route alternatives include:

- Construction impacts;
- Effects of new spur roads and centerline travel route;
- Effects of vegetation removal; and

- Effects on occupied homes along the proposed routes.

Construction Impacts

Construction impacts on visual resources would result from the presence of equipment, materials, and work force at the material yards and construction areas along the route, and from the temporary alteration of landforms and vegetation along the right-of-way. Residents or people seeking outdoor recreation activities in the vicinity of the route would see construction equipment and activities from the travel corridors and roads in proximity to the project. View durations would vary from brief to extended. Construction activities would be most visible for those portions of the project adjacent to major travel corridors (Interstate 80, U.S. Highway 50, Highway 278, Highway 306, and Highway 892) or in proximity to communities (Dunphy and Crescent Valley).

Seven potential locations have been identified for construction materials yards, as shown on [Figure 2-10](#) in Chapter 2.

1. Site #1 is located at an industrial site adjacent to Interstate 80 near Dunphy (Conoco Mining Lubricants site).
2. Site #2 is located at an old mine site located on Highway 306. The proposed yard would be located on both sides of the highway.
3. Site #3 is located at an agricultural site along the northern part of Highway 278.
4. Site #4 is located on agricultural land along the southern part of Highway 278 in Diamond Valley.
5. Site #5 is located on BLM land located within a mining complex on previously disturbed grounds.
6. Site #6 is located on the east side of Highway 93 near the highway and railroad crossing.

SPPC would obtain permission from property owners and/or agencies to use the material yards. Five of the six sites are located next to highways, and two are located next to rail sidings. The sites were selected based on existing land uses, existing surface disturbance, potential for successful reclamation, and suitable access to both major roadways and rail sidings. It is anticipated that four or five construction yards would be needed to construct the project, each averaging 20 acres in size. The yards would be used for materials, equipment, and fuel storage; maintenance activities; the contractor's office; and parking. The material yards would be restored to the condition that they were in prior to the start of construction or as otherwise agreed upon by SPPC and the property owners. It is anticipated that Sites #1, #2, #3, #4, and #6 would be visible from major highways and county roads but would not create a adverse visual impact due to their location on previously disturbed sites. However, Sites #3, #4, and #6 would require new ground disturbance resulting in a visual contrast that may create a short-term visual impact.

☐ **Impact Visual-1: Potential Visual Impacts During Construction**

Use of construction material yards may create a short-term adverse visual impact; however, this impact would be less-than-significant. Mitigation is not required.

Direct effects to visual resources along the entire study corridor would stem from the surface disturbance required for the improvements to existing access roads, clearing the centerline travel route and temporary spur roads, and clearing vegetation around tower sites. Access roads are defined as existing roads that might be used to access the construction and maintenance sites from the nearest State Highway, US Highway, and County roads. SPPC proposes to use three types of access roads to construct the project: paved roads, dirt roads that do not require improvements, and dirt roads that may require improvements. Paved roads and dirt roads that do not require improvement account for approximately 50% of the total access road mileage in the study area. Use of these is not expected to have adverse impacts to visual resources. However, the resulting visual contrast created from the

improvement of dirt roads may potentially have an adverse visual impact if they exceed the established or interim management objectives for the area.

Temporary spur roads would be cleared in areas where existing access roads parallel the route alignment and would be used to avoid clearing a new centerline travel route. Spur roads would be about 30-feet wide, would extend from the existing parallel access roads to the tower locations, and would be reclaimed by SPPC after project completion. Spur roads may be used along Segments A, B, and I (located in VRM Class III and IV areas). Clearing of spur roads is generally consistent with the management objective of the VRM Classes and, with the proposed reclamation efforts, is not considered a significant visual impact.

Vegetation would be cleared to create a centerline travel route for vehicle and equipment access to the tower sites. The centerline travel route would be an average of 12-15 feet wide, but would be expanded up to about 30 feet wide maximum in some areas to provide passing areas and turnouts. Tables 2-5 and 2-6 in Chapter 2 estimate the extent of temporary and long-term disturbance associated with the centerline travel route. Segments A, B, and I may be close enough to existing parallel roads that construction of a centerline travel route could be avoided by clearing temporary spur roads to access the tower locations.

After construction, SPPC would revegetate the centerline travel route. However, it is expected that the annual inspections by SPPC workers on ATVs would eventually create a two-track dirt path (about 12 feet wide) along the revegetated centerline travel route. The majority of the study corridor is located in VRM Class III and IV areas, and the transmission line would be generally consistent with the established management objectives. Therefore, no significant visual impact is expected in these areas.

Significant visual impacts as a result of improved access roads, spur roads, and the centerline travel route are expected with the vicinity of KOPs 5, 15, 17, 21, and 24. The project, as proposed and viewed from these locations, is considered to exceed the established VRM Class objectives and therefore has a significant impact to visual resources. It is reasonable to conclude that surface disturbance in these areas would further contribute to visual degradation

❑ *Impact Visual-2: Access Road Impacts within the Vicinity of KOPs 5, 15, 17, 21, and 24*

Improvement of existing dirt access roads, new temporary spur roads, and the centerline travel route along the transmission corridor would create a significant visual impact within the vicinity of KOPs 5, 15, 17, 21, and 24.

❑ *Mitigation Measure Visual-2*

After selection of the preferred route and certification of this EIS, SPPC should implement mitigation measures to reduce the visual contrast by implementing the following measures.

- Restore areas that are not needed for operation and maintenance to something close to the previous condition.
- Use topographic features and landforms to screen the spur roads and centerline travel route where feasible.
- Retain existing rock formations and vegetation whenever possible.
- Construct access roads and the centerline travel route at appropriate angles from the originating primary travel route to minimize extended, in-line views of newly graded terrain. This mitigation is dependent upon the ability to safely construct, maintain, and utilize the road/route.

☐ ***Impact Visual-3: Visual Impacts Due to Vegetation Removal***

Direct effects to visual resources along the corridor would stem from the removal of vegetation to provide the necessary electrical clearance. Generally, all trees over 15 feet in height and within 55 feet of the centerline would be removed to provide the necessary clearance. This would result in the introduction of a linear feature in the landscape that generally is hard to mitigate. Additionally, removal of tree cover would expose the ground surface, which is generally lighter in color, and result in a strong visual contrast.

☐ ***Mitigation Measure Visual-3***

- Trees greater than 15 feet tall should be cut or topped to the minimum necessary height to provide for a conductor clear zone. Trees shorter than 15 feet should not be cut or trimmed unless they directly conflict with a structure site or wire stringing area.
- The edges of the corridor alignment should be feathered, thinned, and/or scalloped to minimize the impacts of a strong edge feature in the landscape.
- Allow trees proportionally greater than 15 feet tall to remain near structure sites where the conductor is supported at its highest elevation.
- SPPC's Reclamation Plan (see Appendix E) should include measures to revegetate the disturbed areas to minimize the visual contrast created by the bare ground.

☐ ***Impact Visual-4: Conflicts with VRM System Goals and Objectives***

The overall goal of the BLM's VRM System is to minimize visual impacts and ensure that mitigation measures are applied to adverse visual contrast conditions. These include reduction of contrast in project areas that meet the VRM objectives and are not considered to be significant impacts. The following visual design techniques should be used to reduce the overall contrast of the transmission line along all route segments regardless of level of impact.

☐ ***Mitigation Measure Visual-4***

- (a) Whenever possible, site the transmission line away from prominent viewing locations. Visual contrast decreases as the distance between the viewer and proposed development increases.
- (b) Whenever possible, site the transmission line off of prominent topographic features.
- (c) Due to the prominent structural contrast of angle towers, site angle towers off of prominent topographic features.
- (d) Restore all disturbed areas that are not required after construction is completed.
- (e) Whenever possible, use existing vegetation and topographic landforms to screen the transmission line.
- (f) Establish limits of disturbance that reflect the minimum area required for construction.
- (g) Widen the distance between towers to the maximum extent possible when the transmission line crosses a road.

☐ ***Impact Visual-5: Impacts on Occupied Homes***

The project is generally located in a rural setting away from populated areas; however, it sometimes would traverse within the vicinity of occupied homes. Especially notable locations are where the transmission line would be visible in the immediate foreground to middleground viewing distance. In these areas, residents may perceive the transmission line as permanently degrading the scenic quality of the existing landscape. The project may cumulatively contribute to the proliferation of built structures and the attendant sense of urbanization. While various segments of the transmission line would result in low to moderate visual impacts in the landscape and are not considered significant when analyzed using the BLM VRM system,

individual residents along the route could potentially experience adverse impacts if the transmission line is a prominent feature in the landscape.

Table 3.9-2 estimates the number of existing occupied homes that would be located within 3,500 feet (approximately 0.66 mile) of the transmission line. Many of these are mobile homes. Depending on the route alternative, 12 to 30 of the homes would be within 1,000 feet of the transmission line, where the prominence of the transmission line towers and conductors would be within the immediate foreground view and potentially create a high visual contrast. Another 138 to 153 would be within 1,000 to 3,500 feet, where the visual contrast would be reduced due to greater distance. From these residences, the transmission line could be visible in the middleground to background views and potentially create a medium to low visual contrast.

**TABLE 3.9-2: ESTIMATED NUMBER OF OCCUPIED HOMES
NEAR THE PROPOSED TRANSMISSION LINE**

Route Alternative	Within 1,000' of Centerline	1,000-3,500' of Centerline
Crescent Valley -- A	27	149
Crescent Valley -- B	30	153
Pine Valley -- A	16	149
Pine Valley -- B	19	153
Buck Mountain	12	138

Source: Stantec helicopter GPS survey, EDAW analysis 2000.

Mitigating the visual contrast in the middleground to background view is easier to accomplish by applying visual design techniques or slightly adjusting the alignment of the transmission line. Very low or no visual contrast is expected to residences located greater than 3,500 feet from the transmission line. This is due in part to the far distance and the ability of the landscape to absorb visual change at such far distances.

The BLM VRM System is designed to address impacts of development on identified visual resources on public lands and not impacts to private residential uses; therefore, this impact cannot be quantified and cannot be considered significant. However, consistent with BLM policy, the overall visual effect of the project should be reduced by all means possible. After certification of this EIS, SPPC should employ visual design techniques where possible to reduce the overall visual contrast of the transmission line in areas where it comes within 3,500 feet of occupied residences.

☐ Mitigation Measure Visual-5

- Evaluate affected residences' viewshed along the preferred route alternative.
- Where possible, site the transmission line towers to minimize impacts on occupied residences' viewsheds.
- Consider employing other visual design techniques as described in Mitigation Measure Visual-4, as appropriate.

Segment A

Segment A is common to all route alternatives. The land within Segment A is primarily open, flat, and sparsely developed. A portion of Segment A, near the I-80 highway, is in a VRM Class III area. The only developments within Segment A are existing transmission line facilities, one commercial structure, a mine, rural residential uses, and roads. The transmission line facilities include an existing 120 kV line and

69 kV line and the Falcon substation. The transmission line within Segment A would parallel the existing lines for the entire length of this segment and cross the I-80 highway within proximity of the Dunphy roadside stop. Segment A would be visible to westbound and eastbound traffic on I-80. As mentioned previously, BLM's Elko planning area RMP designates the I-80 highway as a low visibility corridor. The low visibility corridor is a 3-mile wide (where possible) passage on which existing utility, transmission, and transportation facilities are located and for which future needs may be accommodated if the facility is not evident in the characteristic landscape. The objective for visual resources within this corridor is for management actions not to be evident in the characteristic landscape.

KOP 1 was established on I-80 approximately one-half mile west of the transmission line with a view looking northeast. As seen in the photosimulation prepared for KOP 1, the new transmission line would be located near an existing wood pole line. Motorists would observe them both together in the foreground/background view from the highway. The VRM analysis resulted in a moderate visual contrast in the landscape that is consistent with the objectives of VRM Class III. Thus, Segment A would create a medium visual impact along the I-80 highway in the vicinity of KOP 1, but it is not considered a significant visual impact. However, as discussed in Chapter 5, the Elko RMP would need to be amended to modify a previous decision and allow the transmission line to cross the low visibility corridor along I-80.

Segment J

Segment J is also common to all route alternatives. Segment J is approximately 33 miles in length and would traverse the primarily open and undeveloped lands at the southern end of Long Valley, the Butte Mountains, Jakes Valley, and the Steptoe Valley. Segment J is located within an existing designated utility corridor and would parallel SPPC's existing 230 kV transmission line to the Gonder substation and cross over US 50. Segment J would primarily traverse interim VRM Class III and Class IV areas.

Five KOPs (25-29) were established along Segment J to characterize the potential visual impacts of this segment. KOPs 25-28 are located along US 50 and KOP 29 is located at the Gonder substation. All four KOPs rated contrasts would be consistent with the interim VRM Class objectives; therefore, Segment J would result in low to medium visual impacts. Thus, Segment J would have no significant visual impact.

KOP 25 was established 600 feet northwest of Segment J where it crosses Ruby Lake Road in the vicinity of Sammy Springs. The area is primarily flat with low-lying vegetation and a moderately dense stand of trees. To the right of the view, a prominent landform provides a backdrop in the middleground view to an existing transmission line running toward the southeast. Segment J would be offset approximately 1,000 feet from the existing transmission line. Segment J would directly be visible in the immediate foreground view crossing over Ruby Lake Road and receding into the distant horizon. A transmission tower and its conductors would be seen against the skyline in the immediate foreground view but is visually absorbed by the dark colors of the landforms in the middleground to distant background. The resulting visual contrast is moderate and is consistent with VRM Class III for the area. Thus, Segment J as seen from KOP 25 would result in a medium visual impact and is not considered significant.

KOP 26 was established 0.3 mile northeast of Segment J where it crosses US 50 in Jakes Valley. The area is primarily flat with low-lying vegetation with very few trees and is backdropped by the White Pine Mountain Range in the very far distant view. An existing transmission line is visible crossing the highway in the foreground to the middleground view approximately one-half mile away. Segment J would be visible crossing the viewer's line of site in the immediate foreground view crossing US 50. The resulting visual contrast would be moderate and is consistent with VRM Class IV for the area. Thus, Segment J as seen from KOP 26 would result in a low visual impact, which is not considered significant.

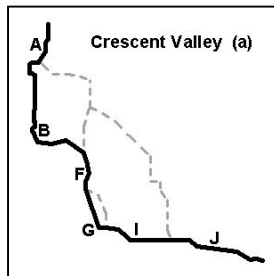
KOP 27 was established adjacent to Segment J approximately one mile south of Robinson Summit on US 50. The area is primarily hilly and covered with a dense stand of trees. The hills are the prominent features in the landscape and provide a backdrop for the viewshed in the foreground to middleground view. To the right of the viewshed, SPPC's existing 230 kV transmission line is visible traversing the hill. Segment H would be visible traversing the highest point of the ridgeline in an easterly direction. The towers are partially backdropped by the hill, but the tops are prominently skylined on the nearby ridgeline. Proposed access roads would be evident due to the nature of the topography and due to vegetation removal. The transmission line and required vegetation removal would create a strong visual contrast which is inconsistent with the interim VRM Class III for this area. Although the transmission line is inconsistent with the management objectives for this area, Segment J is located in a designated utility corridor; thus, Segment J as seen from KOP 25 would result in a medium visual impact and is not considered significant.

KOP 28 (Hercules Gap) was established just north of US 50 and 0.4 mile west of Hercules Gap. Hercules Gap is a prominent topographic feature that dominates the landscape and provides the backdrop for the viewshed. Existing rural residential uses are visible in the middleground, framed by Hercules Gap, and an existing transmission line is visible traversing the far right. From KOP 28, one Segment J transmission tower and its conductors will be visible traversing over the right side of Hercules Gap. The tower is prominently located at the ridge top. The resulting visual contrast would be moderate and is consistent with the VRM Class III assigned to this area. Thus, Segment J as seen from KOP 28 would result in a moderate visual impact, which is not considered significant.

Alternative-Specific Impacts

In addition to the impacts that would be common to all route alternatives, the following presents impacts that would be associated with specific route alternatives. Because each of the route alternatives differ by one or more segments, these alternative-specific impacts are best discussed in terms of their differentiating segments.

Crescent Valley (a) Route Alternative



The Crescent Valley (a) route alternative is comprised of Segments A, B, F, G, I, and J. In addition to the impacts common to all route alternatives discussed above (i.e., Impact Visual-1 through -5), specific impacts for the Crescent Valley (a) route alternative are described below.

Segment B

The land within Segment B is primarily open, flat, and sparsely developed. The developments within the Segment B study corridor include existing transmission line facilities, roads, mining operations, and rural residential uses. Segment B would parallel existing 120 kV and 69 kV transmission lines for much of its length. Segment B traverses the western side of Whirlwind Valley prior to heading south toward the Cortez Mountains. Within Segment B, there are two potential re-routes (the K and L re-routes), as discussed below.

Six KOPs (2-7) were established along Segment B to characterize the potential visual impact of this segment. All the KOPs, with the exception of KOP 5, create low to medium visual impacts and would meet their VRM Class objectives.

KOP 2 was established at a unique geologic feature to assess the impacts to the visual setting of this site. From this location, the transmission line traverses primarily open, flat, and undeveloped lands with mountain landforms serving as a backdrop to the view. From KOP 2, Segment B (via the L re-route) is located approximately 1.5 miles away at its nearest point and just visible in the background view. It is subordinate to the landscape and results in a moderate degree of visual contrast consistent with the VRM Class IV assigned to this area. Thus, Segment B (via the L re-route) as seen from KOP 2 would result in a low visual impact and is not considered significant. Due to the same reasons listed above, Segment B would result in medium visual impacts to the visual setting of the geologic feature and is not considered a significant impact.

KOP 3 and KOP 4 were established on Highway 306. KOP 3 is located just south of the town of Crescent Valley. The landscape is primarily flat with existing rural residential development and wood pole transmission lines. KOP 4 is located farther south on Highway 306 and 0.4 mile north of the transmission line crossing. The volume of viewers in both of these areas is generally low to moderate. The transmission line would be visible in the middleground view approximately one-half to one mile from the KOPs with a backdrop of mountain landforms and existing transmission lines. The transmission line's prominence in the landscape is low and would generally result in a moderate visual contrast in the landscape. The area is classified as VRM Class IV, and the moderate contrast would result in a low visual impact for this area; thus, a significant impact is not expected within the vicinity of KOPs 3 and 4.

KOP 5 was established in the vicinity of Cortez Canyon Road just south of Cortez Canyon. The area has gently sloping hills with low-lying vegetation and is undeveloped. This area has been inventoried and classified by the BLM as VRM Class III, where the management objective is to retain the existing character of the landscape. The transmission line would be directly adjacent to the KOP 5 and visibly prominent in the foreground view. The transmission towers would skyline the ridgeline, creating a strong visual contrast. Segment B, as seen from KOP 5, would create a strong visual contrast, which is inconsistent with the management policy of partially retaining the existing character of the landscape. For these reason, Segment B would create a significant visual impact within the vicinity of KOP 5.

□ *Impact Visual-6: Impact of Segment B from KOP 5*

Segment B as seen from KOP 5 would create a strong visual contrast and is inconsistent with the VRM Class III objective of partially retaining the existing character of the landscape.

□ *Mitigation Measure Visual-6*

Consider re-routing part of proposed Segment B to the west along the K re-route, predominantly in a VRM Class IV area, which allows major modification of the landscape to occur. Implementation of this mitigation measure would constitute low/no visual impact as seen from KOP 5.

KOPs 6 and 7 were established at the southern end of Segment B prior to its convergence with an alternate route, the K re-route. KOP 6 is located in the town of Cortez looking west. The Toiyabe Range serves as a backdrop, and evidence of small-scale historic mining is visible in the immediate foreground view. The area has been inventoried and is classified as VRM Class III. The proposed transmission line would be located approximately one mile from KOP 6 in the middleground view. The transmission line would be closely backdropped by the Toiyabe Mountain Range, which is dark in color, and have the effect of visually absorbing the prominence of the transmission line. The resulting visual contrast would be low and would create a low visual impact, which is consistent with the VRM Class III objectives. The town of Cortez is considered a significant historic site, but due to the distance from Segment B and KOP 6, no adverse visual impact is expected. Thus, no significant visual impact is expected along Segment B in the vicinity of KOP 6.

KOP 7 is located on Cortez Canyon Road just north of the convergence of Segments B and the K re-route. The area is classified as VRM Class III, the background view is closely backdropped by the nearby Toiyabe Range, and past mining activities are evident. To the right of the viewshed, an existing wood pole transmission line runs north-south in the immediate foreground view. The transmission line would be visible in the foreground/middleground view and would be backdropped by the Toiyabe Range. Segment B would be visible against the sky at the ridgeline and would create a moderate contrast in a VRM Class III area, which is consistent with the management objectives. The resulting visual impact is medium; thus, Segment B would not create a significant visual impact within the vicinity of KOP 7.

K Re-route (along Segment B)

The K re-route was identified as a possible way to avoid sensitive resources on Segment B. The K re-route would diverge from Segment B just north of Cortez Canyon and travel southwest toward Copper Canyon and south through the Toiyabe Range, reemerging south of the Town of Cortez. The K re-route would converge with the original alignment (Segment B) within the vicinity of KOP 7. The area is predominantly hilly and would require the transmission line to cross a number of ridgelines, although it is unlikely that the ridgeline crossing would be visible from KOP 5, 6, or 7. At KOP 5, the K re-route would not be visible and would result in no visual impacts in this area.

From KOP 6, the K re-route would be visible approximately 1.7 miles away, traversing down the slope of the Toiyabe Range in the far distant view. Due to its distance and the Toiyabe Range backdrop absorbing the prominence of the towers, the resulting contrast is expected to be low. This is consistent with the VRM Class III objectives, and the resulting low visual impact is not considered significant.

From KOP 7, the K re-route would potentially be visible emerging at the ridgeline of the Toiyabe Range in the middleground/background view and traversing down the slope toward the foreground view. The K re-route converges here with Segment B. Segment B would be visible off to the left of the viewshed running parallel to the dirt road. As discussed earlier, Segment B would result in a moderate visual impact in a Class III area. The K re-route would be located in a Class IV area; therefore, it would be reasonable to say that the K re-route would have similar or less impact than Segment B. Based on these factors, the K re-route would result in a moderate visual contrast, which is consistent with VRM Class IV objectives. Thus, the K re-route would create a low visual impact, which is not considered significant.

L Re-route (Along Segment B)

The L re-route was identified as a way to avoid sensitive resources on Segment B. The L re-route begins at the north end of Whirlwind Valley and heads west and south toward Cortez Canyon paralleling existing transmission lines. At KOP 2, the L re-route would be barely visible in the far background view and would result in no significant visual impact as viewed from KOP 2. See Segment B for further impact discussion.

Segment F

Segment F is approximately 16 miles in length and completely located in VRM Class IV. The northern portions of Segment F would be located in Garden Valley to the east of Roberts Mountain on primarily open, flat, and sparsely developed lands. The segment would roughly parallel Highway 278 to the west. Lands along the southern portion of the segment near Henderson Summit are more heavily wooded and sloped. KOP 18 was established along Segment F to characterize the potential visual impact of this segment. It is located approximately two-thirds of a mile east of Segment F on Highway 278. The land is primarily flat with dense low-lying vegetative cover and is framed to the right of the viewshed by a hill in the foreground and the Roberts Mountains in the background. Segment F would traverse primarily in the foreground and middleground view and can be seen against the backdrop of Roberts Mountains. The resulting moderate contrast is consistent with the VRM Class IV objective and results in a low visual impact, which is not considered significant.

Segment G

Segment G would pass to the west of Whistler Mountain on the eastern edge of the Kobeh Valley and would cross U.S. Highway 50, a state-designated Scenic Byway, prior to joining Segment I. Segment G would be predominantly located in VRM Class IV lands.

KOPs 19 and 20 were established along Segment G to characterize the potential visual impact of this segment. KOP 19 is located at the Pony Express Trail, approximately 400 feet east of Segment G as it crosses the trail. The area has gently sloping landforms and is densely covered with trees. Three transmission towers and their conductors would be visible in the immediate foreground view against the sky, resulting in a strong contrast in the landscape. The resulting strong contrast is consistent with the management objectives of Class IV, thus resulting in a medium visual impact that is not considered significant. The project's visual impact on the historic setting of the Pony Express Trail is provided in Section 3.16.3.

KOP 20 was established 0.3 mile west of the proposed crossing of Highway 50 prior to the natural landscape feature called Devil's Gate. The area is primarily flat with low-lying vegetation and low mountains forming the backdrop. To the right of the viewshed is an existing access road to a mining area. KOP 20 would create a strong contrast in the landscape but would be consistent with the management objectives, resulting in medium visual impacts. Thus, Segment G as seen from KOPs 19 and 20 would not have significant visual impacts.

Segment I

Segment I is approximately 30 miles in length and would be located within the southern end of Diamond Valley. This segment would traverse the Diamond Mountains and would head east toward the Newark Valley. Segment I would parallel existing transmission lines for its entire length, including SPPC's 230 kV line and a 69 kV line. The land is primarily open, sparsely developed, and primarily located in VRM Class IV with some areas in Class III.

Only one KOP was established along Segment I to characterize the potential visual impact of this segment. KOP 24 is located inside Eureka Canyon along the Eureka-Palisade Railroad grade, approximately 900 feet north of the proposed crossing for Segment I. The topography of the landscape undulates from this viewpoint and is enclosed by landforms to the left and right of the viewshed. An existing transmission line is clearly visible in the middleground view against the Richmond Mountains. Tree cover is sparse in the middleground view, but due to the viewing angle, it is moderately dense in the foreground view to the right.

Towers and conductors of Segment I would be highly visible and seen crossing the viewshed in the middleground and foreground views. Due to the nature of the topography, the transmission towers would be located prominently on the landforms and create a strong visual contrast. The strong visual contrast is inconsistent with the objectives to partially retain the existing character of the landscape for Class III areas and results in a high visual impact. Thus, Segment I as seen from KOP 24 is considered a significant visual impact. The project's visual impact on the historic setting of the Eureka-Palisade Railroad is discussed in Section 3.16.3.

□ Impact Visual-7: Impact of Segment I on VRM Class III Visual Resource

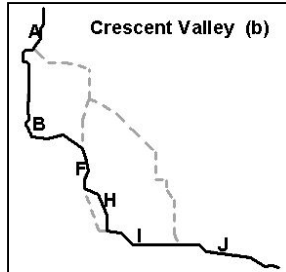
Segment I as seen from KOP 24 would create a strong visual contrast in the landscape that is inconsistent with the VRM Class III objective of partially retaining the natural character of the landscape resulting in a significant visual impact.

□ Mitigation Measure Visual-7

Reduce the structural prominence of the towers by minimizing the skylining effect. Design tower locations within design constraints, along the proposed centerline so they are not

objectionably situated on the prominent landforms. Implementation of this mitigation measure should reduce the contrast of the transmission line to an acceptable level that is consistent with the VRM Class III objectives.

Crescent Valley (b) Route Alternative



The Crescent Valley (b) route alternative is comprised of Segments A, B, F, H, I, and J. It follows a similar alignment to the Crescent Valley (a) route, except that it uses Segment H instead of Segment G.

Segment H

Segment H is approximately 20 miles in length and would pass to the east of Whistler Mountain on the western edge of Diamond Valley. The lands in this area are primarily open and undeveloped. Portions of Segment H would parallel Highway 278 and would cross over US 50, a designated state Scenic Byway. Segment H would pass through mostly VRM Class IV areas, with the exception for the Class III area bounding the Pony Express Trail in the Garden Pass area and Class II area bounding Anchor Peak and Devil's Gate.

Three KOPs (21-23) were established along Segment H to characterize the potential visual impact of this segment. KOP 21 was established at Tyrone Creek at the Pony Express Trail. KOP 22 was established 0.8 mile east of Devil's Gate on Highway 50 looking eastbound. KOP 23 was established on Highway 50 looking westbound approximately 0.8 mile east of the proposed crossing. KOPs 22 and 23 are located in VRM Class IV areas and are typical views that a viewer driving on US 50 would experience. It is expected the number of viewers in this area would be high due to the state highway status. From KOP 22, the transmission line would be directly visible in the foreground/middleground views against the nearby topographic features. The resulting visual contrast is strong. From KOP 23, Segment H would be seen in the foreground and middleground view against distant mountain backdrops and in front of exiting rural residences/ranches. The resulting visual contrast is strong. Segment H as seen from these two KOPs (22 and 23) would create a strong visual contrast in the landscape designated as VRM Class IV, resulting in a medium visual impact that is not considered significant.

KOP 21 was established on the Pony Express Trail adjacent to Tyrone Creek and 700 feet west of Segment H as it traverses the creek and the trail in the Garden Pass Area. The area has been inventoried and assigned VRM Class III by the BLM. The Pony Express Trail is clearly evident in the foreground view running east toward the horizon. The landscape is undulating with landforms framing the right and left side of the viewshed. A mountain range serves as a backdrop to the viewshed but is very distant in the horizon. The vegetation is composed of low-lying vegetation and low-level trees. Three transmission towers of Segment H would be highly visible, crossing the viewshed in the foreground and middleground view. Due to the low-level trees and prominent landforms, the towers and conductors would only be partially screened and be visible against the sky, creating a strong visual contrast. The contrast is inconsistent with the management objectives of this area resulting in a high visual impact. Thus, Segment H, as seen from KOP 21, is considered a significant visual impact. The project's visual impact on the historic setting of the Pony Express Trail is provided in Section 3.16.3.

☐ **Impact Visual-8: Impact of Segment H on VRM Class III Visual Resource**

Segment H as seen from KOP 21 would create a strong visual contrast in the landscape resulting from the towers and conductors prominent visibility against the sky in the immediate

foreground view and is inconsistent with the interim VRM Class III objective of partially retaining the natural character of the landscape.

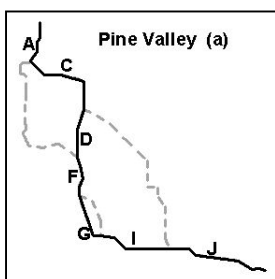
☐ Mitigation Measure Visual-8a

The impacts of Segment H as seen from the KOP 21 cannot be totally mitigated. However, tower placement, reclamation of the centerline travel route or nearby access roads, revegetation, and the minimization of tree trimming should be used to limit visual impacts to the greatest extent possible.

☐ Mitigation Measure Visual-8b

Minimize skylining of tower and conductors and design tower locations within design constraints along the proposed centerline so they are not objectionably situated on prominent landforms.

Pine Valley (a) Route Alternative



The Pine Valley (a) route alternative is comprised of Segments A, C, D, F, G, I, and J. It follows a similar alignment to the Crescent Valley (a) route, except that it uses Segments C and D instead of Segment B.

Segment C

Segment C would be located on open and undeveloped lands. Much of this land is flat, except for those areas where Segment C would pass through the Shoshone Range. The only developments within the Segment C study area are scattered rural residential uses and existing roads. Within the study corridor, the area has been inventoried and classified by the BLM as VRM Class III and IV, with the majority in Class IV. Two KOPs (8 and 9) were established along Segment C to characterize the potential visual impact of this segment. KOP 8 is identical to KOP 2 but with the addition of another view frame to the right. The transmission line is approximately 1.5 miles away from the viewpoint and can be seen against distant and near background topographic features. The transmission line would create a moderate visual contrast in the landscape but is consistent with the VRM Class IV designation resulting in a low visual impact. As with KOP 2, the distance of Segment C (1.5 miles) from KOP 8 would create a moderate visual contrast in the landscape resulting in a low visual impact to this geologic feature. Thus, no significant impact is expected from Segment C within the vicinity of KOP 8.

KOP 9 is located one-tenth of a mile south of the proposed Segment C crossing on Highway 306. The area is primarily flat with distant mountains forming the backdrop. The area is classified as VRM Class IV. Segment C would be visible in the foreground to background view. Certain portions of the transmission line would be visible against the sky in the near foreground views, with a backdrop of distant mountain in other views. Segment C as seen from KOP 9 would create a moderate visual contrast in a VRM Class IV area, which is consistent with the management objectives. The resulting visual impact is medium and is not considered a significant impact.

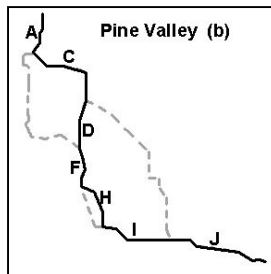
Segment D

Segment D would be located in Pine Valley on primarily open, flat, and sparsely developed lands and is approximately 19 miles in length. Segment D runs parallel to Highway 278 and the historic Eureka - Palisade Railroad grade. At its closest point, Segment D would be within 0.6 mile of the railroad grade. BLM lands in the vicinity of Segment D have been inventoried and are classified as VRM Class IV.

Two KOPs (10-11) were established along Segment D to characterize the potential visual impact of this segment. KOP 10 is located 0.6 mile to the east of Segment D along the Eureka-Palisade Railroad grade. From KOP 10, Segment D would be visible in the middleground view approximately 0.6 mile away and would create a moderate visual contrast against the existing landscape and is consistent with the VRM Class IV objectives. The resulting medium visual impact would not be considered a significant impact. The project's impact on the historic setting of the Eureka-Palisade railroad is discussed in Section 3.16.3.

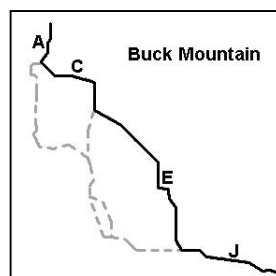
KOP 11 is located at the Highway 278 Rest Area at the juncture of Highway 278 and JD Road. The landscape is primarily flat, with distant mountains serving as a backdrop. There is evidence of a gravel extraction pile, and a wood pole distribution line is visible in the immediate foreground view running west into the distant mountains. Segment D would run perpendicular to the existing utility line and would be visible in the middleground view approximately one-half mile from KOP 11. The transmission line would be backdropped by the mountains, which act to absorb the visual change in the landscape. The transmission line would create a moderate visual contrast consistent with the VRM Class IV objectives for this area. The resulting visual impact would be low and not considered a significant visual impact.

Pine Valley (b) Route Alternative



The Pine Valley (b) route alternative is comprised of Segments A, C, D, F, H, I, and J. It follows a nearly identical alignment with the Pine Valley (a) route, except that Pine Valley (b) uses Segment H rather than Segment G, traversing the eastern side of Whistler Mountain rather than the west. All of these segments are described above.

Buck Mountain Route Alternative



The Buck Mountain route alternative is comprised of Segments A, C, E, and J.

Segment E

Segment E is the longest of all the segments, at approximately 75 miles. It would be located on primarily open, flat, and sparsely developed lands. It would also, however, traverse three mountain ranges: Sulphur Mountain, Diamond Mountain, and Buck Mountain. In addition, Segment E would traverse the Pony Express Trail historic site, which is eligible for listing in the NRHP. VRM Class designations within the study corridor include Class II, III, and IV, with the majority occurring in Class IV. Within the Ely BLM District, VRM Classes have not been established as part of the RMP planning process; therefore, interim VRM Classes have been assigned. The eastern half of Diamond Mountain and the Buck Mountain Range have interim VRM Class III assignment, and the Pony Express Trail has interim VRM Class II assignment.

Six KOPs (12-17) were established along Segment E to characterize the potential visual impact of this segment. The project would create a strong visual contrast in the landscape as viewed from all six KOPs, but 12, 13, 14, and 16 are consistent with the interim and established VRM Classes, resulting in a medium visual impact that would not be considered significant. However, KOPs 12, 15, and 16 require an additional level of analysis due to their proximity to cultural resource sites. The project's visual impact to these cultural resources are evaluated in Section 3.16.3. KOPs 15 and 17 are located in VRM Class II and III, respectively, and are inconsistent with the established management objectives and would result in high visual impacts that are considered significant. These are described below.

KOP 15 is located two-tenths of a mile east of the proposed Segment E at the Pony Express Trail. The trail itself has been widened and bladed and runs east-west toward the distant mountains. The area is relatively flat with low-lying vegetation with ridges on the left and right side framing the viewshed. The Sulphur Mountain Range provides a backdrop in the distant view. Segment E as seen from this KOP would traverse the Pony Express Trail in the foreground and middleground view. From this viewpoint, an angle tower and its conductors would be highly visible and prominently skyline on the ridges to the left. This situation creates a strong contrast in an interim VRM Class II area. The strong contrast created by Segment E conflicts with the management objective of retaining the natural character of the existing landscape. Due to the strong contrast and inconsistency with the management objectives, Segment E as viewed from KOP 15 would create a significant visual impact. The project's visual impact on the historic setting of the Pony Express Trail is evaluated in Section 3.16.3.

☐ *Impact Visual-9: Impact of Segment E on the VRM Class II Resource*

Segment E as seen from KOP 15 would create a strong visual contrast in the landscape inconsistent with the interim VRM Class II objective of retaining the natural character of the landscape. Therefore, Segment E would create a significant visual impact.

☐ *Mitigation Measure Visual-9*

The visual effects on a VRM Class II Resource cannot be totally mitigated. The effects can be minimized through strategic placement of angle towers within design constraints along the proposed centerline in a more obscure location relative to the view from KOP 15.

KOP 17 is located approximately 400 feet east of Segment E at Buck Pass. The area is hilly with low-lying vegetation and medium density tree cover. The viewshed is framed by a large landform that starts in the middleground and recedes to the east in the background view. From this viewpoint, Segment E would be visible in the foreground to middleground view and would closely parallel the dirt road. The towers and conductors would be highly visible against the backdrop and would occasionally be visible against the sky, creating a strong contrast in an interim VRM Class III area. The strong contrast is inconsistent with the management objectives for this area and creates a high visual impact that is considered significant.

☐ *Impact Visual-10: Impact of Segment E on VRM Class III Visual Resource*

Segment E as seen from KOP 17 would create a strong visual contrast in the landscape and is inconsistent with the interim VRM Class III objective of partially retaining the natural character and results in high visual impact that is considered a significant impact.

☐ *Mitigation Measure Visual-10*

The impacts of Segment E as seen from KOP 17 cannot be fully mitigated. However implementing the following measures would minimize the strong contrast effects. Use existing roads for access to tower locations when possible to reduce ground disturbance, and after construction, reclaim access roads to close to pre-existing conditions, except for tree clearance and other access necessary for annual inspections and maintenance.

Summary Comparison of Route Alternatives**TABLE 3.9-3: SUMMARY OF IMPACTS BY ROUTE ALTERNATIVE**

Impact	Crescent Valley (a)	Crescent Valley (b)	Pine Valley (a)	Pine Valley (b)	BUCK MOUNTAIN
Impact Visual-1: Potential Visual Impacts During Construction	X	X	X	X	X
Impact Visual -2: Access Road Impacts	X	X	X	X	X
Impact Visual-3: Visual Impacts Due to Vegetation Removal	X	X	X	X	X
Impact Visual-4: Conflicts with VRM System Goals and Objectives	X	X	X	X	X
Impact Visual-5: Impacts on Occupied Homes	X	X	X	X	X
Impact Visual-6: Impact of Segment B from KOP 5	X	X			
Impact Visual-7: Impact of Segment I on VRM Class III Visual Resource	X	X	X	X	
Impact Visual-8: Impact of Segment H on VRM Class III Visual Resource		X		X	
Impact Visual-9: Impact of Segment E on the VRM Class II Resource					X
Impact Visual-10: Impact of Segment E on VRM Class III Visual Resource					X

Table 3.9-4 summarizes the visual impacts associated with each KOP.

TABLE 3.9-4: SUMMARY OF IMPACTS AT KOPS

Segments	KOPs		VRM Class	Contrast Rating	VRM Visual Impact ¹
A	KOP 1	1-80 Crossing	III	Moderate	Medium
B	KOP 2	Geologic Feature	IV	Moderate	Low/No
	KOP 3	Crescent Valley	IV	Moderate	Low
	KOP 4	Highway 306	IV	Moderate	Low/No
	KOP 5	Geologic Feature	III	Strong	High
	KOP 6	Cortez	III	Low	Low/No
	KOP 7	South of Cortez	III	Moderate	Medium
C	KOP 8	Geologic Feature	IV	Moderate	Low/No
	KOP 9	Highway 306	IV	Strong	Medium
D	KOP 10	Eureka-Palisade RR grade	IV	Moderate	Medium
	KOP 11	Highway 278 Rest Area	IV	Moderate	Low/No
E	KOP 12	Eureka-Palisade RR grade	IV	Strong	Medium
	KOP 13	Highway 278	IV	Strong	Medium
	KOP 14	RR Pass	IV	Strong	Medium
	KOP 15	Pony Express Trail	II	Strong	High
	KOP 16	Warm Springs Ranch	IV	Strong	Medium
	KOP 17	Buck Pass	III	Strong	High
F	KOP 18	Highway 278 at Frasier Creek	IV	Moderate	Low/No
G	KOP 19	Pony Express Trail	IV	Strong	Medium
	KOP 20	Highway 50 at Devil's Gate	IV	Strong	Medium
H	KOP 21	Pony Express Trail	III	Strong	High
	KOP 22	Highway 50 Eastbound	IV	Strong	Medium
	KOP 23	Highway 50 Westbound	IV	Strong	Medium
I	KOP 24	Eureka-Palisade RR grade & Diamond Valley Road	III	Strong	High
J	KOP 25	Ruby Lake Road	III	Moderate	Medium
	KOP 26	Highway 50 at Marking Corral Summit	IV	Moderate	Low/No
	KOP 27	Highway 50 at Robinson Summit	III	Strong	Medium
	KOP 28	Hercules Gap	III	Moderate	Medium
	KOP 29	Highway 93 at Gonder Substation	IV	Low	Low

¹ Impact Ratings:

High The visual contrast of the project would exceed the VRM Class for an area or conflict with applicable plans and adopted policies of governmental agencies. This is considered a significant impact

Medium The visual contrast of the project would be fully at, but not exceed, the VRM Class guidelines for that area.

Low/No The visual contrast of the project is clearly less than the VRM Class guidelines for the area.

RESIDUAL IMPACTS

After mitigation, there may be residual impacts to visual resources on all route alternatives. The visual impact may conform with the applicable VRM Class objectives, but there is no way to completely eliminate the residual visual impacts of a transmission line.

After the selection of the preferred alternative, a detailed COM Plan would be completed providing site-specific mitigation measures where the project would exceed the VRM Class objective. The COM Plan would also contain monitoring protocols to ensure compliance with the mitigation measures. While re-routing of the transmission line is a preferred mitigation measure, it may be determined that avoidance is infeasible due to engineering constraints, topography, sensitive habitat or other conditions. In this case, SPPC should implement visual design techniques discussed earlier to reduce the overall visual contrast to the extent possible.

NO ACTION ALTERNATIVE

Under the No Action Alternative, visual impacts associated with the project would not occur. However, similar impacts could occur in other areas as SPPC and the Nevada PUC would begin emergency planning efforts to pursue other transmission and/or generation projects to meet the projected energy load capacity shortfall.

FIGURES 3.9-1 THROUGH 3.9-30

(CLICK ON ANY FIGURE BELOW TO LINK TO THAT IMAGE)

- [FIGURE 3.9-1 Key Observation Points \(KOPs\)](#)
- [FIGURE 3.9-2 KOP 1: I-80 Crossing](#)
- [FIGURE 3.9-3 KOP 2: Geologic Feature](#)
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